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| **Elementary Engineering**  **SOUND LESSON 15/16**  **(Define/Design/Optimize)** | | | | |
|  | 4 | 3 | 2 | 1 |
| **Written explanation of optimizing throughout the design/building process** | Articulates more than three times when design was modified. | Articulates three times when design was modified. | Articulates two times when design was modified. | Articulates one or zero times when design was modified. |
| **Final instrument** | Designed an instrument that produced three different pitches. Optimized to meet challenge criteria. | Designed an instrument that produced three different pitches. | Designed an instrument that produced two pitches. | Designed an instrument that did not change pitch. |
| **Cooperative engineering** | Listened respectively during presentations and offered constructive feedback when appropriate. The feedback was scientifically based. | Listened respectively during presentations and offered constructive feedback when appropriate. | Listened respectively during presentations. | Did not participate during participation. |

**Notes:**